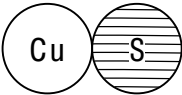


## Red (NC Tier 4–7)

Question	Answer	Mark	Level
1 a	Carbon dioxide	1	4
b	Distillation	1	4
c	Carbon dioxide and argon.	1	6
d	Helium and neon.	1	6
e	Nitrogen and oxygen.	1	5
f	Nitrogen.	1	6
2 a	Copper sulphide	1	5
b	One atom of copper and one atom of sulphur.	1	5
c	 <p>One atom of copper and one atom of sulphur. Atoms joined.</p>	1 1	5 5
d	Copper + Sulphur → Copper sulphide	1	6
3 a	Oxygen	1	5
b	Molecules	1	5
c	Nitrogen	1	6
d	C	1	6
4 a	Fixed melting point.	1	7
b	Melts over a range of temperature.	1	5
c	Lead 1: nitrogen 2: oxygen 6.	1	5
5 a	Nitrogen 1, hydrogen 3.	1	5
b	CH <sub>4</sub>	1	7
6 a	Between 86 °C and 30 °C.	1	5
b	Results less reliable/would miss important measurements.	1	5
c	Less likely to catch fire/spurt out of end of tube.	1	5
d	3	1	6
e	Experiment does not go to this temperature/this is below normal room temperature.	1	6

Scores in the range of:	NC Level
5–9	4
10–15	5
16–19	6
20–25	7